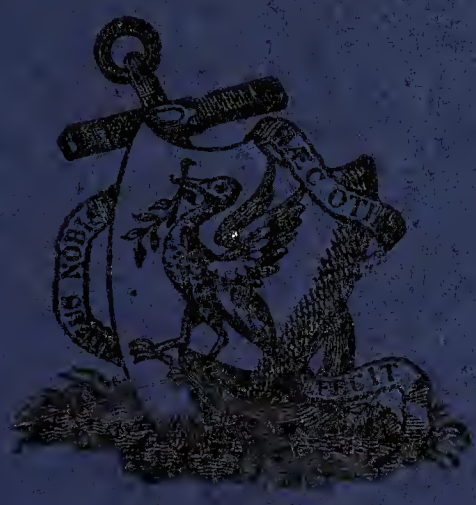


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1 MAY 1962

PORT OF LIVERPOOL



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

PORT HEALTH AUTHORITY

FOR THE YEAR

1961

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PORT HEALTH AUTHORITY

OF

LIVERPOOL

REPORT FOR THE YEAR 1961

BY THE

MEDICAL OFFICER OF HEALTH

This is the 89th Annual Report upon the work of the Liverpool Port Health Authority.

The Permanent Constitution of the Liverpool Port Health Authority defines the limits of the port for health purposes, as coincident with the limits laid down by H.M. Customs. By "The Appointment of the Port of Liverpool Order, 1956", the port of Liverpool is "An area bounded by a line:

(1) commencing at the termination of the port of Chester, namely at Hilbre Point (which is referred to as the Red Stones in Hoylake on the Point of Wirral in the Treasury Warrant dated 16th December, 1847, appointing the port of Chester): and

(2) continuing up the River Mersey on the Cheshire shore to Ince Ferry the western termination on the Cheshire shore of the port of Manchester, but excluding (where it touches the port of Manchester) so much of the Eastham Channel in the River Mersey as is enclosed by an imaginary line of dolphins on the east side of the Eastham Channel and, at a distance of five hundred and thirty-eight yards from the seaward extremity of the eighty feet lock at Eastham, a further imaginary line to the foreshore at right angles to the first line: thence

(3) crossing the River Mersey in a supposed straight line to Dungeon Point being the western termination on the Lancashire shore of the port of Manchester: and

(4) continuing along the coast of the County of Lancaster to the southern boundary of the port of Preston, namely an imaginary line drawn in a true north-west direction from the inner north-west sea mark on the beach at Formby Point shown in the Admiralty chart of Liverpool Bay, dated 9th July, 1954.

The port shall include all islands, rivers, bays, channels, roads, bars, strands, harbours, havens, streams, and creeks (except the Manchester Ship Canal) with the specified limits and shall extend seaward to a distance of three miles from low water mark along the coast within the specified limits.”

SECTION I STAFF

TABLE A

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Professor Andrew B. Semple	Medical Officer of Health	5.12.52	V.R.D., M.D., Ch.B., D.P.H.	Medical Officer of Health, City of Liverpool. Professor of Public Health, University of Liverpool. Supervising Medical Inspector of Aliens.
Dr. J. B. Meredith Davies	Deputy Medical Officer of Health	1.5.53	M.D., B.S., D.P.H.	Deputy Medical Officer of Health, City of Liverpool. Medical Inspector of Aliens. Lecturer in Public Health, University of Liverpool.
Dr. T. L. Hobday ...	Principal Medical Officer	19.6.58	M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.P.A.	Medical Inspector of Aliens
Dr. A. J. Graham ...	Assistant Medical Officer	12.6.59	L.R.C.P., L.R.C.S.(Ed.), L.R.F.P.S.(Glas), D.P.H.	Medical Inspector of Aliens
Dr. W. H. Parry ...	Boarding Medical Officer (part-time)	1.4.55	M.D., Ch.B., D.P.H.	Principal Medical Officer (Epidemiology), City of Liverpool. Medical Inspector of Aliens

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
A. Griffith ...	Boarding Medical Officer (part-time)	1.1.59	M.B., Ch.B., D.P.H.	Assistant Medical Officer, City of Liverpool. Medical Inspector of Aliens.
D. E. Philips ...	Boarding Medical Officer (part-time)	1.4.60	M.R.C.S., L.R.C.P.	Assistant Medical Officer, City of Liverpool. Medical Inspector of Aliens.
M. J. O'Brien ...	Boarding Medical Officer (part-time)	1.10.60	B.A., M.B., B.Ch., B.A.O., L.M., C.P.H.	Assistant Medical Officer, City of Liverpool. Medical Inspector of Aliens.
J. G. McCoy ...	Chief Port Health Inspector	7.6.46	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board: Liverpool University School of Hygiene Sanitary Science Certificate: Liverpool University School of Hygiene Meat and Food Certificate.	—
E. M. Dutton ...	Chief Port Food Inspector	10.1.60	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board: R.S.I. Meat and Other Foods Certificate.	—
G. M. Gillies ...	Administrative Assistant	6.5.59	L.G.E.B. Promotion Examination.	—

The Staff also includes:

A Deputy Chief Port Health Inspector, three Port Health Inspectors, one Assistant Port Health Inspector and ten Rodent Operatives;

A Deputy Chief Port Food Inspector and four Port Food Inspectors, and one Assistant Port Food Inspector;

One Clerical Officer and one Shorthand Typist.

SECTION II

TABLE B

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1961

Ships from	Number	Tonnage	Number Inspected		Number of ships reported as having, or having had during the voyage, infectious disease on board
			By Medical Officers	By Port Health Inspectors	
Foreign Ports...	6,762	16,004,635	392	4,229	98
Coastwise ...	4,669	3,571,112	2	108	2
Total ...	11,431	19,575,747	394	4,337	100

SECTION III

TABLE C

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

The figures for 1961 are, unfortunately, not available until later in the year. Predicted figures, based upon the quinquennium 1956-1960 inclusive, are:

PASSENGER TRAFFIC

No. of passengers INWARDS	No. of passengers OUTWARDS
160,000 approximately	130,000 approximately

(These figures do not include traffic between Liverpool and Northern Ireland.)

CARGO TRAFFIC

Principal Imports	Principal Exports
Flour, grain, etc., sugar, molasses, etc., wood, fruit and vegetables, cotton, ores and scraps, meat, feeding stuffs for animals, tea, butter, cheese, eggs, etc., cocoa, seeds or nuts for expressing oils, copper, coal, oils, fats, resins and gums, hemp, jute, sisal, etc., hides and skins, tobacco, rubber.	Iron and steel manufactures, chemicals and sodas, salt, machinery, pottery, glass and glassware, sugar, molasses, etc., flour, grain, etc., copper, brass, tin, etc., soap and oils, etc., ale, beer, wine, spirits, etc., cement, electrical goods, etc., paper, cardboard, etc., vehicles, aircraft, motor cars, locomotives, etc., bricks, cutlery, hardware, etc., fine goods.

Ships arrive in Liverpool from ports all over the world.

SECTION IV

INLAND BARGE TRAFFIC

The number of barges plying in and about the port of Liverpool is approximately 150, representing an estimated total of 22,000 tons.

CANAL BOATS (Public Health Act, 1936, Part X)

The number of canal boats still on the Liverpool Register is 141, but of these, only about 60 operate in the port area. There are only a small number of canal boats, still used as dwellings, plying in and about the docks. Most barges are employed as "Day Boats", the crews living aboard only during the day.

During 1961 there has been a further considerable reduction in the number of canal boats employed in the port.

No. of boats inspected	...	...	...	...	83
No. of boats with contraventions	...	...	...	...	3
No. of contraventions	...	...	...	...	3
No. of contraventions corrected	...	...	...	...	3
No. of boats inspected for registration	...	...	...	...	Nil

SECTION V

WATER SUPPLY

(1) There has been no change in the source of water supply for either the seaport or the airport.

(2) Drinking water used in ships must always be as pure and palatable as possible and to attain this, storage tanks and pipe lines must always be maintained in the cleanest condition. The port health inspectors took many routine samples in the course of the year in addition to those samples taken at the request of shipowners or when drinking water was considered likely to be contaminated.

In the year a total of 356 samples from 73 ships, one tender and one hopper, were sent for bacteriological examination: 96 were considered unsatisfactory and chlorination, pumping out and refilling of tanks was undertaken. Co-operation in this work has always been received from the Ministry of Transport, shipowners and agents.

(3) There are no water boats in regular use in the River Mersey. There is one tender, several tugboats and one hopper which are equipped to carry water and which are used under special circumstances only.

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS, 1952

(1) List of Infected Areas.

The list of infected ports is as follows: Rangoon, Dar-es-Salaam, Rio de Janeiro, all ports in China, Indo-China, India, Pakistan, Belgian Congo, Liberia, Nigeria (including British Cameroons), Ghana, Colombia, and Ecuador. This list is compiled from the Weekly Epidemiological Record of W.H.O. and is notified, in written form, to all officers of H.M. Customs, the river pilotage service, and Mersey Docks and Harbour Board.

(2) Incoming vessels from infected ports are required to notify their time of arrival by radio, signals to be sent not less than four hours before arrival in the river. Normally this signal is sent when the Mersey Pilots board vessels off Anglesey. Further information concerning the movements of such a ship is relayed by the Port Radar Station, which receives information from the river pilots' portable short-wave radio. Suitable arrangements are then made between the medical officer and the master of the boarding tender, and the medical officer boards and inspects the vessel as it enters the Mersey.

The port health tender, which is chartered from the Liverpool Fire Service, is the vessel "William Gregson" which is equipped with two-way radio, emergency medical supplies, and a cradle designed to assist in the transshipment of sick persons.

(3) *Notifications Other Than By Radio.*

Many shipping companies notify the arrival of their vessels by letter or telephone. This has not been found to be always reliable and radio messages from incoming vessels are always required.

(4) There has been no change in the designated mooring stations allotted for the examination of shipping, though most vessels are examined while under way.

The number of ships visited by the boarding medical officers during the year was 394 of which 265 were from infected ports.

By arrangement with Manchester Port Health Authority, vessels bound for Manchester from infected ports are examined by the Liverpool Port Health Authority in the river. During 1961, 35 of the vessels boarded were bound for Manchester.

(5) (a) Cases of infectious diseases, other than quarantinable diseases, are accommodated in Fazakerley Isolation Hospital.

(b) There has been no change in the method of surveillance and follow-up of contacts of infectious diseases.

(c) Any disinfection which may be required in ships is done by inspectors of the Port Health Authority. During 1961, 78 disinfections after infectious disease were carried out. Infected beds and bedding were removed for steam disinfection.

PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1952

Liverpool is served by a major airport at Speke, 9 miles from the City centre. The Port Health Authority is responsible for enforcing the above regulations in the airport. Passenger aircraft arriving at the airport come from other airports within the United Kingdom, Eire, and the Continent, and few aircraft arrive directly from infected areas. An examination room is maintained in the main airport building, and the medical officers

on the Port staff who hold appointments as Medical Inspectors under the Aliens Order, are available at the request of the Immigration Authorities to conduct inspections of persons arriving by air. All passengers arriving from an infected area are inspected and the validity of their medical certificates ascertained.

Forewarning of such aircraft is given by H.M. Customs to the Port Health Authority and later information is supplied directly from Aircraft Control in the airport.

Indian crews for merchant ships are frequently flown from India to join ships in the United Kingdom. In some cases these men arrive by air elsewhere, normally London, and proceed to Liverpool to join their ship: notification of this is always received from the Airport Medical Officer. On occasions, chartered aircraft bring the crews directly to Liverpool.

Such arrivals are kept under daily surveillance here until either the vessel sails or until the incubation periods for quarantinable diseases have expired.

SECTION VII

SMALLPOX

Cases of smallpox from the port area continue to be sent to New Ferry Isolation Hospital, though it is likely, in the near future, that new premises at Sankey, near Warrington, will be used. Under present arrangements a case of smallpox would be disembarked in the river by tender, and conveyed to Wallasey Cattle Stage, from which ambulance transport to the hospital is supplied by Liverpool City Ambulance Service. The Medical Officer of Health is responsible for the vaccinal state of the ambulance crews.

Smallpox consultants available are:—

Professor Andrew B. Semple, Health Department, Hatton Garden,
Liverpool, 3.

Professor A. W. Downie, Department of Bacteriology, The University,
Liverpool, 3.

Dr. E. R. Peirce, 8, Grosvenor Road, Liverpool, 19.

Dr. A. B. Christie, Fazakerley Hospital, Longmoor Lane, Liverpool, 9.

Facilities for laboratory diagnosis of smallpox are available in the Liverpool University Bacteriological department.

No cases of smallpox or suspected smallpox occurred during the year.

It was decided, towards the end of 1961, to institute a close examination of the vaccination documents relating to ships which trade with foreign ports where smallpox might be expected. Port health inspectors visited as many vessels as their other duties permitted and completed a proforma which recorded the vaccinal state of the crews. The results were not reassuring. The first ship examined, a large passenger vessel trading with smallpox areas, showed that only 67 out of a total crew of 109 possessed valid International Certificates, though the ship carried both a doctor and a supply of lymph. Further examinations were made of other vessels belonging to the same company, with comparable results. Subsequently, vessels of other companies, trading with smallpox areas, were examined in this way, and it was clear that carelessness concerning protection against smallpox was widespread. Of 17 vessels visited only 4 could be considered adequately protected against this disease. In all cases where deficiencies were noted, the situation was discussed with the shipping companies concerned who were notified of the dangers created by inadequate arrangements for regular vaccination.

These inspections will be continued during 1962 and the results will eventually be analysed and published. Meanwhile it is clear that a considerable danger is present, affecting all seaports and arising from the indifferent attitude on the part of certain shipowners and shipmasters to the question of protection against smallpox.

The proforma, used by the port health inspectors on their visits to ships, is reprinted on page 12.

Liverpool Port Health Authority

VACCINATION REGISTER

- Note: 1. This applies only to **smallpox** vaccinations.
2. When the vaccination documents are produced on his behalf the man need not be seen: where the documents are **not** available for inspection, however, the man should be seen and interrogated individually. If he has no documents, write "seen, but no documents" right across the last six columns. If the man cannot be interviewed write "man not seen". **Remember** these two notes need only be made when the document itself cannot be inspected.

Date

Vessel

Normal area of trading.....

Owners or Agents

Quantity of smallpox lymph held.....

Length of time *present* stock held.....

Usual interval between renewals of lymph.....

Summary

Ship visited by Inspector

Total crew

Number vaccinated less than 12 months ago.....

 " " between 13 & 24 months ago.....

 " " " 25 & 36 months ago.....

 " " 37 months ago or more.....

SECTION VIII

VENEREAL DISEASE

Venereal infection aboard ships remains at a low level. All cases were referred for treatment to the Seamen's Dispensary.

Small cards, showing the location of treatment centres, with times of treatment, are issued, where appropriate, by the medical officers and health inspectors.

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES IN SHIPS

No cases, or suspected cases, of cholera, plague, relapsing fever, smallpox, typhus, or yellow fever occurred in the Port during 1961.

Poliomyelitis

A vessel from West Africa arrived in the Mersey on 30th August, bound for Manchester: the boarding medical officer learned from the Master that one member of the crew had been landed at Burutu in West Africa suffering from paralytic poliomyelitis. The remaining members of the crew were examined and found well, and Manchester Port Health Authority was informed in order that surveillance could be instituted on the arrival of the ship.

The special effort instituted in 1959 to provide immunisation of seafarers against poliomyelitis has continued, and during the year many have been inoculated on board ship or at a clinic in the Health Department.

Typhoid Fever

A cargo vessel arrived in Liverpool on 16th February from Mediterranean ports. Following a radio signal from the ship a medical officer boarded the vessel in the river and found an apprentice to be suffering from enteritis, later diagnosed as typhoid fever. The condition was probably contracted between 24th January and 6th February: during this period the man went ashore at Casablanca, Genoa, Leghorn and Naples.

The crew were signed off on arrival and twenty did not re-sign for the coastwise voyage, which was scheduled to commence within four days: accordingly notifications were sent to the Medical Officers of

Health for districts and ports concerned. No specimens were found to be positive. All water samples were satisfactory: unfortunately food-stuffs purchased during the voyage had been consumed before arrival in Liverpool.

Food-Poisoning

A vessel arrived from Mediterranean ports at Liverpool on 23rd May, and the boarding medical officer arranged the admission to hospital of a member of the crew suffering from enteritis: this was later found to be due to infection with *Shigella flexneri* type 6. Faecal specimens were taken from other members of the crew and two of these were positive for this organism. The two men concerned were given antibiotic treatment and a second specimen taken and examined after five days. In one case the specimen was again positive and the man was taken off the ship, which sailed for the Mediterranean. He remained under treatment until clear of infection. A third man reported sick to the Shipping Federation doctor in Liverpool and then left for his home in Swansea before any investigation could be made. His symptoms suggested the same organism might be responsible and Swansea Health Department were advised. Samples from this man and his home contacts were, however, later reported negative. Seven water samples were examined and one was unsatisfactory: the tank was chlorinated and refilled. Nine food samples were all found negative for salmonellae, staphylococcus pyogenes and b.dysenteriae.

In October, a report from a doctor of the Shipping Federation, concerning several cases of gastro-enteritis on board the vessel "Hororata", led to an investigation of the ship's crew, food and water supplies. Faecal specimens were obtained and the addresses of those who had left the vessel before being investigated were sent to the Medical Officers of Health in areas concerned. The results of this part of the investigation were all negative. No food purchased abroad remained for examination and the specimens which were tested were negative. The water supply, however, showed a very high coliform count in almost all samples and three successive attempts at chlorination, pumping out and refilling of tanks failed to provide satisfactory results. The ship sailed for New Zealand before any source of contamination could be traced and consequently the water in use was chlorinated to Board of Trade standards. The Ministry of Transport in Liverpool were kept informed of our

investigations and advised when the ship left. The Medical Officer of Health, Auckland, New Zealand, was told of the findings here in order that he might continue to investigate the ship on its arrival.

Several other ships during the year 1961 had reports of diarrhoea among crew members but none of these reached the proportions of those reported above. In the year, 166 faecal specimens and 23 food samples were submitted for bacteriological examination.

Anthrax

Investigation into this disease was commenced in 1958 and the annual report for 1959 gave an analysis of the sampling results. This showed that the anthrax organisms were widespread in imported hides and an attempt was made in 1960 and 1961 to discover the reason for this degree of contamination.

The results of the analysis of fluids used for hide-washing at centres abroad suggest that the water in the washing pits, even though treated with disinfectants, may often show the presence of anthrax organisms, and this may, of course, lead to the contamination of hides which were, up to this process, uncontaminated. The small numbers of specimens analysed could lead only to this general observation, and a larger enquiry is planned for this year.

The scheme in operation at the Government Wool Disinfection Station, to give protection to all persons working there, all of whom are exposed to infection by the anthrax bacillus, has been very satisfactory. This started in March, 1960. The establishment employs 33 persons and only 4 have refused the offer of immunisation. This is believed to be the first attempt to protect against anthrax by immunisation.

The course consists of an inoculation at 0, 6, and 20 weeks and an annual booster of a non-toxic antigenic material present in sterile filtrates of *Bacillus anthracis*. All new workers at this station are offered this protection as soon as they are employed.

TABLE D

The number of cases of infectious disease landed from vessels arriving at Liverpool and those occurring in Liverpool-bound ships which were disposed of before arrival, are shown in the following tables:

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS DURING 1961

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
Other Infectious Diseases			
Chickenpox	5	10	14
Dysentery	1	1	2
Food-Poisoning	—	7	1
Gastro-Enteritis	5	3	6
German Measles	—	1	1
Infective Hepatitis	—	2	2
Influenza	—	1	1
Malaria	3	—	3
Measles	4	—	4
Meningitis	—	1	1
Mumps	3	1	4
Pneumonia	3	2	5
Pyrexia of Unknown Origin	2	—	2
Scarlet Fever	3	1	3
Tuberculosis	1	6	7
Typhoid Fever	—	1	1
Total	30	37	57

CASES OF INFECTIOUS SICKNESS OCCURRING IN VESSELS DURING THE VOYAGE
BUT DISPOSED OF PRIOR TO ARRIVAL. YEAR 1961

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera... ..	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
Other Infectious Diseases			
Chickenpox	4	14	10
Dysentery	—	1	1
Food-Poisoning	—	2	1
Gastro-Enteritis	—	2	1
German Measles	2	—	1
Infective Hepatitis	—	4	3
Influenza	—	3	2
Malaria	—	5	5
Measles	8	1	8
Mumps	1	3	4
Pneumonia	2	1	3
Poliomyelitis	—	1	1
Tuberculosis	—	1	1
Total	17	38	41

CASES LANDED FROM OTHER SHIPS (COASTWISE VESSELS)

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Gastro-Enteritis	—	5	1
Tuberculosis	1	—	1
Total	1	5	2

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

The use of malarial suppressants in ships entering the port from affected areas has continued to keep the incidence of this disease at a low figure. Eight cases of malaria or suspected malaria were reported from 8 ships in the year.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

There were no cases, or suspected cases, of plague in ships arriving in the port of Liverpool during 1961. One suspected rat from a quay was found, on bacteriological examination, to be negative for plague.

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

The port is divided into four districts. A port health inspector, a rat searcher, and a rat catcher are allotted to each district; the rat searcher is responsible for searching for evidence of rats, and the rat catcher for dealing with rat infestation. Each rodent operative is given specific tasks daily, to be carried out at set times, and the work is checked by cross visits.

Foreign-going ships entering the port are visited by a port health inspector and a rat searcher as soon as possible after docking. Traps are set in all ships from infected ports, and in all foreign-going ships when rat evidence is reported where time in port permits.

In view of the reduced danger from plague, the only rats now sent for bacteriological investigation are a small number caught in ships from a plague port, or rats found dead near these ships.

Ratguards

Foreign-going ships, whether arriving from abroad, or proceeding coastwise, are visited on arrival by a port health inspector, and advised to fit ratguards on all moorings. Ratguards should be of sheet metal at least three feet in diameter, with sharp edged circumference, or the rope may be parcelled with canvas, or sacking coated with tar. This tar must be kept in a sticky condition. Ships' officers are also advised not to leave cargo nets hanging between the ship and shore at night.

Deratting

Deratting in ships is accomplished by:—

- (1) Routine trapping by port health rat catchers.
- (2) Trapping and/or poisoning by rat catchers employed by the shipping companies.
- (3) Fumigation with hydro-cyanic acid gas or sulphur dioxide. This method is alone approved for the issue of the International Deratting Certificate. Rodenticides are not approved for this purpose in the Port of Liverpool. The contractors undertaking this work are as follows:—

(a) Rat Catching.

Associated Fumigators (Northern) Ltd.

Disinfestation Ltd.

Hivey Fumigation Co.

Irlam Insecticides.

A. Sewell.

(b) Fumigators.

Associated Fumigators (Northern) Ltd.

Disinfestation Ltd.

Fumigation Services Ltd.

Hivey Fumigation Co.

Deratting in dock premises is accomplished by: —

- (1) Routine trapping by port health rat catchers.
- (2) Routine trapping and poisoning by rat catchers employed by the Mersey Docks and Harbour Board.
- (3) Trapping and poisoning by private rat-catching firms employed by shipping companies and warehouse owners.

Examination of ships for rats

This is accomplished by: —

- (1) Enquiries and search by port health inspectors.
- (2) Routine searching by port health rat searchers, who search foreign-going ships on arrival and also make periodic searches during the discharge of cargo. Any ship for which a deratting or deratting exemption certificate has been applied for, is searched throughout when the cargo spaces are empty. 598 vessels were so examined in 1961. Immediate investigation is undertaken of reports from ships' masters and other officers, dock workers, and privately employed rat catchers.

Rat Proofing

When temporary or permanent rat harbourage is discovered in ships, the master and the owners (or agents) are informed and advised how to eliminate it: every effort is made to see that vessels are made reasonably ratproof before a deratting or deratting exemption certificate is issued.

Regular surveys are made of all premises in the vicinity of ships, and no unnecessary accumulations of stores or gear are permitted.

TABLE E
RATS DESTROYED

Rodents Destroyed During the Year 1961 in Ships from Foreign Ports

Category	Number
Black Rats	534
Brown Rats	—
Species not known	—
Sent for examination	60
Infected with plague	—

**Rodents Destroyed During the Year 1961 in Docks, Quays,
Wharves and Warehouses**

Category	Number
Black Rats	1,329
Brown Rats	492
Species not known	—
Sent for examination	22
Infected with plague	—

Number of mice destroyed in vessels	155
Number of mice destroyed on quays	690
Number of mice examined from vessels and quays	48

In addition to the above, 2,259 rats were caught and destroyed by the Dock Board rat catcher and private agencies.

Number of Visits to Vessels by Rat Catchers	4,006
Number of Visits to Vessels by Rat Searchers	6,724
Number of Visits to Quays, Sheds, etc., by Inspectors	5,602
Number of Visits to Quays, Sheds, etc., by Rat Searchers	2,236
Number of Visits to Quays, Sheds, etc., by Rat Catchers	19,625

TABLE F

DERATTING CERTIFICATES ISSUED

**Deratting Certificates and Deratting Exemption Certificates Issued During
the Year 1961**

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	Total	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
35	5	—	—	40	558	598

SECTION XIII

INSPECTION OF SHIPS FOR NUISANCES

The port health inspectors reported during the year that their visits to vessels using the port showed that the high standard of crew accommodation attained in the past few years has been maintained. In the majority of ships, crew quarters were clean and in good condition and

in most of the new ships coming into service it was apparent that the owners had put much thought into providing as much comfort as possible for their crews.

Catering and toilet facilities appear, in general, to be satisfactory and the following table shows that the majority of nuisances found were simple to correct. Where the defect was one of a structural nature local shipowners and agents were generally able to correct them in this port.

Table G
INSPECTIONS AND NOTICES
Year 1961

Nature and Number of Inspections				Notices Served		Result of Serving Notices		
				Statutory	Other Notices			
Nature of Inspection						Nuisances Remedied		
Dirty Crew Quarters	—	none	627	627	Remedied	
Verminous Quarters	—	„	979	949	„	
Dirty Washhouses or W.C.'s	—	„	56	56	„	
Foul Water Tanks	—	„	—	—	„	
Foul Bilges	—	„	—	—	„	
Foul or Choked W.C.'s	—	„	3	3	„	
Accumulations of offensive refuse	—	„	49	49	„	
Dirty Pantries and Galleys	—	„	11	11	„	
Dirty Storerooms	—	„	6	6	„	
Leaky Deckheads	—	„	—	—	„	
Defective Heating System	—	„	—	—	„	
Defective Bulkheads	—	„	—	—	„	
Defective Portlights, Skylights, etc.	—	„	4	4	„	
Defective or Inadequate Ventilation	—	„	—	—	„	
Defective Deck Covering	—	„	1	1	„	
Gear Stowed in Crew's Quarters	—	„	1	1	„	
Damp Quarters	—	„	1	1	„	
Rat Harbourage	—	„	—	—	„	
Defective W.C. Fittings	—	„	5	2	„	
Defective Soil Pipes	—	„	—	—	„	
Defective Waste Pipes or Scuppers	—	„	5	5	„	
Defective Washing Facilities	—	„	2	—	„	
Inadequate Lighting	—	„	—	—	„	
Smoke Nuisances	—	„	44	44	„	
W.C.'s discharging on Quay	—	„	86	86	„	
Miscellaneous...	—	„	15	12	„	
Number of Inspections				4,337				
Total				4,337	—	1,895	1,857	„

Food Hygiene in Ships

Certain provisions of the Food Hygiene (General) Regulations 1960 became applicable in November 1960 to home-going ships and other craft undertaking catering or retail food business. In 1961 all such vessels operating in the port were inspected and where alterations were necessary to meet the requirements, these were notified to the shipowners and were, in every case, completed.

NATIONALITY OF SHIPS VISITED

Year 1961

Nationality	Visits	Re-Visits	Total
British	2,760	195	2,955
Dutch	235	2	237
German	231	5	236
Norwegian	218	4	222
Swedish	161	22	183
Spanish	128	2	130
Danish	72	4	76
Liberian	71	6	77
American	64	1	65
Greek	61	9	70
Russian	44	1	45
Finnish	38	1	39
Japanese	33	1	34
Polish	29	—	29
Israeli	24	—	24
Jugoslavian	24	—	24
Belgian	18	—	18
Panamanian	18	1	19
Egyptian	16	11	27
French	16	—	16
Turkish	15	2	17
Argentinian	10	1	11
Italian	10	2	12
Rumanian	7	1	8
Cuban	6	1	7
Bulgarian	5	—	5
Chilean	5	—	5
Lebanese	4	—	4
Swiss	3	—	3
Portuguese	3	—	3
Icelandic	2	—	2
Chinese... ..	1	—	1
Costa Rican	1	—	1
Honduras	1	—	1
Moroccan	1	—	1
Paraguayan	1	—	1
Persian	1	—	1
Totals	4,337	272	4,609

INSPECTION OF DOCK PREMISES

Routine inspection of dock premises was maintained during the year and the following defects and nuisances were observed and remedied.

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harborage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	2	—	5	25	155	—	34	—	—	—	1
Quays ...	—	—	—	—	—	1	—	2	69	—	5	—	—	—	1
Roadways ...	—	—	—	—	5	—	—	1	259	1	12	1	—	—	1
Canteens	—	—	—	1	6	7	7	14	11	—	27	2	1	7	150
Factories	—	—	—	—	—	—	—	3	1	—	1	—	—	—	—
Warehouses	—	—	—	—	—	—	2	7	1	—	—	—	—	—	—
Latrines ...	—	—	—	2	5	—	—	—	—	—	16	—	—	—	—
Airport ...	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—
Offices ...	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—
Total ...	—	—	—	3	18	8	14	56	497	1	95	4	1	7	153

THE FOOD HYGIENE (DOCKS & CARRIERS) REGULATIONS, 1960

These Regulations came into operation on 1st November, 1960, and in the report of that year their purpose was explained. Briefly the Regulations state that if food, packed in such a way that it might become contaminated, is handled during unloading of ships, particular measures must be exercised to prevent contamination. It was also stated in the report for 1960 that a summary of the requirements under the new Act would be prepared and circulated to firms concerned, because it was then appreciated that many changes would be necessary and many problems would have to be overcome in order that these requirements could be met. The summary was sent out in March, 1961.

A major problem was the allocation and preparation of sheds. Delay in delivery of inward cargoes was causing congestion in the sheds and hampered the washing and cleaning required before the discharge of open food cargo. The best solution, of course, would be to have certain berths and sheds used exclusively for the handling of such a food. This possibility has been discussed with the Mersey Docks and Harbour Board.

Existing equipment such as rope and canvas slings were considered unsuitable for certain cargoes of food and these have been replaced by metal and plastic covered appliances for this work.

A difference of opinion arose between Liverpool Port Health Authority and the Liverpool Master Porters and Master Stevedores Association concerning the interpretation of the Regulations in relation to the discharge of "open" meat: it was finally accepted, after discussions, that all persons employed in the handling of such meat must wear protective clothing. This clothing takes the form of a smock of strong brown drill cloth, re-inforced across the chest, which covers the shoulders, upper arms and the front of the wearer.

The provision of waterless hand cleaners was continued and increased in 1961. These cleaners are provided at all berths where food cargoes are handled and in many dock sheds where dirty cargo is being loaded or discharged. A waterless hand cleaner was described in the 1960 report.

Two cold stores in the dock area governed by the Regulations have met all the requirements of these Regulations.

The food inspectors now make reports on the conditions prevailing at the time of discharge of "open" food from every ship and in this way a record is maintained of the observance of or contravention of the Regulations. Warning letters were sent, where necessary, to organisations which do not comply with the Regulations.

It has not been necessary to institute any prosecutions in 1961.

SECTION XIV

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1934/48

The Public Health (Shellfish) Regulations, 1934/48 authorise local authorities to issue Orders controlling the sale of shellfish which have been collected from polluted areas. The limits of the Port of Liverpool, defined at the introduction of this Report, bound such an area and

hence an Order made in 1951 by the Liverpool Corporation is displayed on notice boards, erected at suitable sites on the Cheshire and Lancashire approaches to the shores. This Order forbids the collection of shellfish for sale from the prescribed areas, unless they are submitted to a process of cleansing in premises, and by apparatus, approved by this Authority.

A medical officer and the Chief Port Health Inspector of the Port Health Authority inspected premises and apparatus at the request of a cockle merchant of Scarisbrick, who sought our approval under the Order. Samples which were taken and submitted for bacteriological examination proved satisfactory and the apparatus and premises were found suitable, and approval was granted.

New warning notices have been made in a distinctive type this year and erected at the sites described above.

CLEAN AIR ACT, 1956

and

DARK SMOKE (PERMITTED PERIODS) (VESSELS) REGULATIONS, 1959

During 1961 the attention of the Master or Chief Engineer of 45 vessels had to be drawn to the above Regulations. In every case the nuisance was abated and no proceedings were instituted.

DOCK CANTEENS

A very comprehensive survey of the 57 canteens in the dock area was completed this year. It includes date and type of construction and materials used, the facilities for catering, cleansing, toilets, and refuse disposal, hygiene and first-aid requirements. Recommendations were made to the owners when alterations were thought necessary and regular visits by Port Health Inspectors have assisted in maintaining a satisfactory standard of hygiene in these canteens.

VACCINATIONS AND INOCULATIONS

During 1961 the Port Health Authority continued to give an inoculation service, available at very short notice, to shipping companies using the port. Liverpool Health Department at Hatton Garden was approved as a Yellow Fever Inoculation Centre in 1960, and the inoculations are normally carried out by appointment there. Sailing orders can be altered

at very short notice, however, and this year 26 ships were visited and 770 yellow fever inoculations were given aboard. In addition 28 vaccinations and 43 cholera inoculations were given.

STRAW

Early in 1961, this Authority, under the Food Hygiene (Docks & Carriers, etc.) Regulations, 1960, advised against the use of straw in connection with the discharge of meat, protected only by mutton cloths, from ships. It was considered that this material was likely to provide a risk of contamination and wooden platforms were recommended to replace its use on the quay apron.

In July it was learned that another major port intended to prohibit the use of straw in connection with the transportation of meat, as bacteriological examination of samples had shown high bacterial and mould counts as well as evidence of faecal contamination.

It is not customary in this port to use straw in vehicles transporting meat and it was not found necessary formally to prohibit its use, since the earlier advice against its use had been followed. A small number of samples were, however, examined bacteriologically and results were obtained similar to those found elsewhere.

RADIOACTIVE MATERIALS

The number of ships using the port and carrying this type of cargo is increasing and it was therefore considered necessary that a special store should be available, when required, to hold such materials while awaiting loading. Mersey Docks and Harbour Board provided such a store which was inspected in March and approved by the Port Health Authority and the Radiation Monitoring Service.

From May, when records were commenced, until December, 73 vessels shipped radioactive materials, 35 loading and 38 discharging these cargoes.

SECTION XV

MEDICAL INSPECTION OF ALIENS

Medical Officers holding Warrants of Appointment as medical inspectors of aliens are:

Professor Andrew B. Semple,

Dr. J. B. Meredith Davies,
 Dr. T. L. Hobday,
 Dr. A. J. Graham,
 Dr. W. H. Parry,
 Dr. A. Griffith,
 Dr. D. E. Phillips,
 Dr. M. J. O'Brien.

No other staff are regularly engaged on this work, though the medical officers may be assisted by health visitors from the City staff when necessary. Normally, immigration officers refer to the medical officers any passengers whom they have reason to believe may require examination under the Aliens Order; a medical officer is therefore always present during the disembarkation of passengers from transatlantic liners. The medical officer may, of course examine, independently, any passenger he wishes.

The following table gives the total number of aliens arriving in the Port of Liverpool during 1961 and the number of each of the categories under which alien passengers are classified by the Immigration Department of the Home Office:—

	Visitors	Business Visitors	Contract Seamen	Others	Total
Seaport	5,532	46	—	1,715	7,293
Airport	180	34	643	41	898
Total	5,712	80	643	1,756	8,191

Total number of vessels carrying Alien passengers	840
Number of vessels dealt with by the Medical Inspector	154
Number of aircraft dealt with by the Medical Inspector	10
Total number of aliens landed in the Port	8,191
Number subjected to detailed examination by Medical Inspectors... ..	171
Certificates issued by Medical Inspectors	5

Medical inspections of alien passengers are normally conducted either in the ship itself, or, in relation to aircraft, in the examination room at Liverpool Airport.

MISCELLANEOUS

IMPORTATION OF RAGS

Early in June an Egyptian vessel from Alexandria berthed in a dock at the south end of the river and discharged a consignment of Egyptian rags in bales. Many of the bales had burst because of the poor quality of the hessian wrapping and the rusty condition of the metal bands, and it was learned that some of the men handling the consignment considered the rags to be dangerous to health.

Investigation of the consignment by this Authority failed to substantiate the complaints. There was no offensive odour from the rags, possibly because they were dry: there was no evidence whatsoever of any infestation, and bacteriological examination of specimens confirmed that heat treatment had been given to the rags before export and that no harmful bacteria were present.

The finding of pieces of cotton tissue which might have been used as surgical dressings caused us to advise the Ministry of Health of our findings and the importers were told that the baling of rags must be improved.

No further complaints have been received concerning subsequent consignments of this material.

ASSOCIATION OF PUBLIC HEALTH INSPECTORS

ANNUAL CONFERENCE

Mr. McCoy, Chief Port Health Inspector, was elected vice-chairman of the Sea and Air Port Health Inspectors' Branch of this Association in April, 1961. He attended the Annual Conference of the Association in Bournemouth in September and took part in discussions on Meat Processing, Resistance to Modern Insecticides, Food Hygiene in Dock Premises and other subjects of interest to Port Health Authorities.

FOOD INSPECTION

DESICCATED COCONUT FROM CEYLON

This commodity was first systematically examined in February, 1960, and the report of that year contained a full account of the sampling technique, the results obtained and the limitations of laboratory examinations. In addition some methods of decontamination which were the subject of experiments that year were mentioned.

From 1st January, 1961, the principle of drawing a 5 per cent sample followed by a 10 per cent sample, if any of the original 5 per cent was found to be contaminated, was discontinued and a minimum 5 per cent, without further sampling, was fixed, and the food inspectors were instructed to increase this percentage whenever other commitments permitted. A review of the year's sampling shows that an average figure of 7·8 per cent was attained. Consignments were accepted or rejected on this examination alone. In addition the number of "designated" salmonellae, the presence of which led to the rejection of a batch or consignment, was increased on 1st February, from the original three (*Salmonellae paratyphi-B*, *thompson*, and *typhimurium*), to eight by the addition of *Salmonellae bareilly*, *chester*, *newport*, *senftenberg*, and *stanley*.

Following this change, it was observed that consignments of desiccated coconut, normally identified by leading shipping marks, were being split into smaller units each indicated by various "drop-marks" or numbers, and each imported on a separate customs' entry. The effect of this was to reduce the quantity of coconut rejected following a single adverse laboratory result. Thus in 1960, 76 ships discharged 1,904 consignments (130,717 packages), while in 1961, 73 ships discharged 3,432 consignments (127,959 packages).

In 1960, samples totalled 8,265, of which 64 (0·77 per cent) showed "designated" salmonellae and 415 (5·0 per cent) showed other salmonellae. This year 10,109 samples were taken of which 70 (0·69 per cent) showed designated salmonellae and 319 (3·15 per cent) other salmonellae. There is thus a slight improvement in the cleanliness of the product but the general standard remains unsatisfactory. An improvement had been anticipated in the latter half of the year as a result of the Regulations drawn up by the Government of Ceylon for the control of establishments manufacturing and exporting desiccated coconut, which were to come into operation on 1st July, 1961, but it is understood that lack of equipment necessary for certain processes delayed the effect of these Regulations until December. We look forward however with interest to receiving such coconut in the near future, and special arrangements will be made to ensure full sampling.

Delay between sampling and release or rejection is inevitable, as the identification of organisms may require several days or longer. Where an importer is prepared, however, to arrange for the heat treatment of

the whole consignment at an establishment approved by the appropriate medical officer of health, no sampling is undertaken and the consignment is released at once.

Two establishments undertaking a sterilisation process have been approved, one in Halifax and the other in Norwich, and in the last four months of the year 30 consignments of 800 packages were released immediately after discharge from the ship. The Port Health Authority is always prepared to extend this facility where the process provides satisfactory sterilisation.

DESICCATED COCONUT FROM PHILIPPINES

Four ships discharged 12 consignments consisting of 2,311 packages. These were the first imports of this commodity from the Philippines through Liverpool and a total of 176 samples (7.6 per cent of all packages) were examined bacteriologically. Two samples were found to be infected with a non-designated salmonellae.

DESICCATED COCONUT PRODUCTS FROM U.S.A.

Cake mixtures, originating in U.S.A., having a desiccated coconut ingredient, were landed from 5 ships. The consignments totalled six and were made up of 298 cartons, each containing 12 × 13 or 14-oz. packets.

Fifty-seven samples (19 per cent of the cartons) were drawn and 2 (3.5 per cent) were positive. On this occasion the infecting organism was *Salmonella senftenberg*, a designated type, and consequently 123 cartons from the two consignments concerned were rejected and later re-exported to U.S.A. The American authorities were informed of the rejection and the reason given for their return.

MEAT AND MEAT PRODUCTS

Imports from each country will be considered separately and consignments having public health interest will be reported upon individually.

Meat and Meat Products from New Zealand

These imports gave rise to little concern during the year. In the case of only one consignment, reported below, was it necessary to carry out a 100 per cent examination.

1,300 mutton carcasses were discharged from the vessel "Hauraki" which docked at Liverpool on 23rd March. Preliminary examination on the quay revealed a number of carcasses affected with caseous lymphadenitis. The 100 per cent examination carried out later in a cold store showed that a total of 26 carcasses were so affected. This represented 2 per cent of the consignment and the total weight of meat rejected was $210\frac{1}{2}$ lbs.

Meat from Canada

The vessel "Carinthia" discharged in June two consignments of frozen pig livers. Preliminary examination on the quay indicated that a full investigation was required and the consignments were taken to a cold store for this purpose. The examination was not completed until the end of September.

From the first consignment of 283 cartons, 290 livers, totalling 994 lbs. were rejected following evidence of decomposition, cysts and peritonitis. 1,255 livers (4,374 lbs.) from the second shipment of 859 cartons were rejected for the same reason.

Meat from Argentine

In July the vessel "Defoe" docked in Liverpool. The cargo included three consignments of mutton, each of which, after preliminary examination had shown the presence of caseous lymphadenitis, was submitted to 100 per cent examination.

The first, a shipment of 75 carcasses of wether mutton, had 8 per cent of carcasses (52 lbs.) finally rejected. The remaining two consignments of 419 and 327 carcasses of ewe mutton had 36 carcasses (442 lbs.) and 14 carcasses (120 lbs.) rejected after full examination.

In these last named, 50 per cent and 30 per cent respectively of the carcasses had had one or more glands removed before shipment and the Recognised Official Certificate, considered to be a guarantee of soundness of the meat, was attached in every case.

Meat and Meat Products from Australia

There were several instances of serious defects in consignments of canned meat from Australia during the year and details of these are given below. In every case the Recognised Official Certificate had been issued and bore the name of the examining Commonwealth meat inspector.

In June the vessel "Jason" discharged two consignments of beef. The first, 45 cartons of point-end brisket beef, was examined fully: following this, 67 pieces (84 lbs.) were rejected for onchocerciasis. The second consignment consisted of 119 cartons of boneless cow crops: this was found on preliminary examination to have portions of brisket attached to the crops. The brisket is normally detached before shipment: consequently, in this instance, it was necessary to detain the shipment and 5 cartons were defrosted in order to examine the briskets for onchocerciasis. No evidence of this condition was found and no rejections were made. The exporters were advised that should future consignments of crops be found with briskets attached then it would be found necessary to hold these consignments for a possible 100 per cent examination after defrosting.

A consignment of 45 cartons of boneless brisket beef (point ends) was also discharged in June from the vessel "Wairangi". Onchocerciasis was found in these briskets and 53 point ends (89 lbs.) were rejected.

The "Port Sydney" brought three consignments of canned corned mutton in September. The first of 1,000 cartons (12 x 6-lb. tins per carton), was found on examination to have 5.5 per cent blown tins and contents decomposed and 4,020 lbs. of the shipment were accordingly rejected. The second and third consignments, each of 300 cartons, had 3 per cent and 12.8 per cent respectively blown cans and a total of 12,342 lbs. was rejected from these two shipments.

On the 17th October the "Port Invercargill" docked in Liverpool and discharged two consignments of canned corned mutton. Each was made up of 500 cartons (12 x 6-lb. tins per carton) and a total of 2,057 tins was blown and the contents decomposed. Thus, 12,342 lbs. of meat were rejected as unsuitable for human consumption.

The consignments discharged from the vessels "Port Sydney" and "Port Invercargill" were also found unsatisfactory as certain cans from these shipments, submitted to detailed examination showed some discolouration around the area of the seal and there was evidence that solder was present in the meat. It appeared that in certain cases the cap used to seal the can was too small and an attempt had been made to improve the seal by using large quantities of solder.

The Commonwealth Veterinary Officer was advised of all defects found.

Meat and Lard from U.S.A.

The vessel "Mahseer" docked in Liverpool in December, 1960, and discharged a consignment of 43 cartons said to contain 6 x 10-lb. polythene bags of sheep kidneys. Preliminary investigation revealed decomposition and the consignment was then detained in cold store for a 100 per cent examination which was completed on 16th January, 1961. 42 cartons contained, in fact, a mixture of sheep spleens and sheep kidneys: 1 carton contained 6 x 10-lb. lamb livers, and 287 lbs. sheep spleens were separated from the kidneys. 95 lbs. of sheep kidneys were rejected because of decomposition.

The "Parthia" docked in January with two consignments of meat. The first, 32 cartons of frozen ox kidneys, required a full examination and 14 cartons totalling 826 lbs. were found decomposed and were rejected. The second, of 17 cartons frozen beef kidneys, was detained for defrosting and complete examination. 5 whole cartons (265 lbs.) and 46 kidneys (58 lbs.) were rejected. In addition multiple cysts were found in three decomposed kidneys.

435 cartons of frozen ox tongues formed a consignment discharged in Liverpool from the "Pacific Envoy" in January. 347 cartons were released after preliminary examination, 88 cartons were detained for partial defrosting and further examination led to the rejection of 135 tongues (512 lbs.) for decomposition.

A shipment of 58 cartons, said to contain 6 x 10-lb. bags of sheep kidneys, was landed from the vessel "Mahronda" in London and brought to Liverpool. Preliminary examination revealed decomposition and a 100 per cent examination was undertaken. A mixture of sheep kidneys and spleens was revealed and 9 cartons (525 lbs.), which were decomposed, were rejected. Nephritis and hydronephrosis was also found, affecting some of the kidneys. Spleens, weighing 130 lbs., unaffected by decomposition, were separated from the kidneys and repacked.

During the second quarter of the year three consignments of frozen beef kidneys from U.S.A. were landed at Liverpool. In each consignment decomposition was suspected on arrival and consequently a 100 per cent examination was made in each case.

In the first shipment of 298 cartons, 76 cartons (approximately 5,000 kidneys) weighing 4,540 lbs., were rejected for decomposition and hydronephrosis.

In the second shipment of 146 cartons, decomposition was again present and cystic kidneys were also found. A total of 1,930 decomposed and cystic kidneys weighing 1,827 lbs., were declared unfit for human consumption. 700 decomposed kidneys, weighing 803 lbs. and 62 cystic kidneys, weighing 78 lbs., were found after a 100 per cent examination of the third consignment of 167 cartons and rejected.

In July, 39 cartons from the "Media" were fully examined and 219 decomposed, 15 necrosed and 13 cystic kidneys totalling 244 lbs. were found and rejected.

A consignment described as 280 cartons of sheep livers, which, on examination, in July, in a cold store was found to have 3 cartons of sheep hearts, had 97 cartons affected by decomposition and 5,589 lbs. of meat was rejected.

Two consignments of frozen beef kidneys discharged in the port from the vessels "Parthia" and "Helga Smith" during August, were examined in detail by mid-September. From the first, consisting of 500 cartons, 22 complete cartons (1,314 lbs.) and 113 kidneys (out of various cartons) weighing 110 lbs. were rejected. The second was a smaller consignment, consisting of 81 cartons. Again a full examination was indicated and 1,905 kidneys from 48 cartons were found decomposed. The total meat rejected here was 1,682 lbs.

During the year 32 ships from the U.S.A. carried bulk lard to the U.K.: the consignments totalled 51,601 tons. Sampling of this commodity has been reduced to a low level following the good record of consignments received in previous years and this year the samples again conformed to the Anti-oxidant Regulations and no contraventions of Official Certificates procedure occurred.

Packaged Lard from U.S.A.

During February, discharge of a consignment of 11,366 cartons of this commodity was started in Gladstone Dock and 1,720 cartons had been delivered to the importers when it was found that two drums of an adjacent cargo of tolylene-di-isocyanate had been punctured. Immediately a stop was placed on the cartons already delivered and the balance of 9,646 cartons detained on the quay.

Information was obtained from the importers of the chemical that it was a volatile and toxic substance and there was the possibility of absorption into the lard.

Two samples of lard and samples of packing material, possibly exposed to fumes of the chemical, were submitted to the City Analyst and after extensive examination had been carried out it was reported that no trace of the chemical was found in any of the samples and that the lard was fit for human consumption.

The lard was packed in polythene lined cartons and as an added precaution only sound and undamaged containers were released. 23 failed to satisfy the inspectors because of some damage to the packing and were consequently rejected.

Bulk Lard from France

Three ships carried 729 tons of lard from France. Two of these consignments were sampled and found to comply with the regulations.

Meat and Meat Products from Yugoslavia

Unsatisfactory consignments of canned meat from Yugoslavia continued to arrive in Liverpool from other seaports during the early part of the year and inspection in warehouse showed, as in 1960, great numbers of these tins to be blown or burst.

The consignments were made up of several varieties of meat including ham, chopped pork, lamb tongues, pork loins, gammon ham, and chopped ham. In the first quarter of the year 1,408 tins (12,252 lbs.) were rejected, in the second period for the months April, May and June, 2,949 tins (12,046 lbs.) were rejected. By the end of the quarter ending September, however, a great improvement was noted and only 543 tins (2,400 lbs.) were rejected. The improvement in this trade continued to a marked degree and relating to an approximately similar quantity imported, only 26 tins totalling 130 lbs. were rejected in the last three months of the year.

Meat from Northern Ireland

The vessel "Ulster Monarch" discharged 12 x 28-lb. cartons of pig cheek meat at Liverpool on 4th July and on 8th July, 16 x 28-lb. cartons of boneless pig jowls. Each of these consignments was examined completely and a total of nine pieces were found to be infected with tuberculosis and rejected.

Each carton bore the Veterinary Inspection Certificate of the Ministry of Agriculture, Government of Northern Ireland, and consequently

representation was made to the Authorities. A close scrutiny was made of later consignments.

In August, the "Ulster Prince" brought 14 sow carcasses in an insulated container addressed to the importer in Litherland. The sealed container was not opened by this Authority but we advised the Public Health Department at Litherland following previous experience here. Later we were advised that tuberculosis of the left sub-maxillary gland had been found in a carcass.

Meat from Eire

The vessel "Prethus II" arrived at Liverpool from Eire on 14th September, 1961, carrying six consignments of meat, all of which had been inspected by a veterinary surgeon and bore a certificate of examination. Preliminary examination of each consignment showed the presence of decomposition. The meat was completely examined and the findings are shown below:—

(1) Thirty cartons frozen beef sweetbreads were examined and 29 were found decomposed. 940 lbs. were rejected.

(2) From 164 cartons of frozen beef kidneys, 800 kidneys (953 lbs.) were rejected.

(3) Fourteen cartons of frozen beef tails (560 lbs.) were rejected from a consignment of 559 cartons.

(4) A consignment of 113 cartons of frozen ox tails had 1 carton of 40 lbs. rejected.

(5) Sixty-five cartons containing 390 ox hearts and totalling 1,613 lbs. were rejected from a shipment of 230 cartons.

(6) Eighty-five cartons of beef hearts were examined and of these 44, containing 264 hearts (1,063 lbs.), were rejected.

The vessel "Markab", from Eire, docked at Liverpool on 18th October. She discharged a consignment of 43 cartons of beef sweetbreads and after 100 per cent examination 33 cartons revealed decomposition and the rejected amount of sweetbreads totalled 1,030 lbs.

EGG PRODUCTS

Thirty-three consignments of egg products were landed in the port during 1961. Of these, 23 were exported from Australia, 8 from U.S.A. and 1 from Canada. Two cases of preserved eggs in shell came from Hong Kong.

Following our usual practice of previous years, each consignment was divided, when adequate information was made available, into batches each with its own code mark, thus ensuring that sampling results led either to the release or rejection of the appropriate batch only and not of a whole consignment.

This year egg came to the port in forms slightly different from that of last year. They included crystal egg albumen, dried powdered egg white, frozen liquid whole egg and Chinese preserved egg in shell. In addition various cake mixes contained dried egg.

We continued to sample and test for pathogenic organisms. These had been "designated" from our experience with egg and desiccated coconut and are as follows: *Salmonellae typhimurium*, *paratyphi-B*, *thompson*, *bareilly*, *chester*, *newport*, *senftenberg*, and *stanley*. In September we added *infantis*, *meleagridis*, *montevideo*, *oranienberg*, *tennessee*, *give*, and *muenchen*.

It was decided that, where infection was detected, sterilisation, at an approved establishment in this country and of the importers' choice, would be required before release. Where no infection was detected the consignment would be released unconditionally.

Egg Products from Australia

Twenty-three consignments, totalling 65,089 packages were examined. Samples taken totalled 1,578 and designated salmonellae, namely, *S. typhimurium* (101) *S. senftenberg* (4) and *S. bareilly* (1) were found.

Egg Products from U.S.A.

Eight consignments (763 packages) were landed in Liverpool during the year. Five of these, on sampling, showed infection with salmonellae and the absence of code marks in these smaller shipments required the total amount to be rejected and diverted for heat treatment. *Salmonella oranienberg*, *salmonella tennessee* and *salmonella montevideo* were among those isolated from these five consignments.

Egg Products from Canada and Hong Kong

The shipments from these countries were found free from infection on bacteriological examination and consequently were released unconditionally.

Cake Mix from U.S.A.

The importation of this commodity to the U.K. through Liverpool is a new trade which started in August. Following positive findings in examination of dried egg it was decided to sample this cake mix of which dried egg is an ingredient.

Fifteen consignments totalling 1,551 separate packages were examined and 100 samples were taken. Nine were positive: 6 showed *Salmonella montevideo*, 2 *Salmonella newington*, and 1 *Salmonella anatum*.

Four consignments were infected with *salmonella montevideo* and these, totalling 700 packages, were rejected and released only when arrangements had been completed for their re-export to U.S.A. The health authorities in America were informed of our findings.

FISH AND FISH PRODUCTS

Shrimps from Hong Kong

Four consignments (11 cases) of shrimps, either dried, sliced or as noodles, were landed in the port during the year.

Each consignment was examined and sampled and then assessed according to the standard established and set out in the report for 1959 and all were released. Two, however, were released only after a warning letter had been sent to the importers advising that an improved standard would be required from them in future imports.

Shrimps from U.S.A.

Three consignments (775 cartons) of frozen breaded shrimps were discharged in Liverpool. Two of these (275 cartons) in February from the vessels "Plainsman" and "Arabia" narrowly satisfied the standard and were released. Warning letters were sent to the importers.

The consignment of 500 cartons discharged in May from the vessel "Plainsman" was satisfactory.

Prawns from Japan

During 1961, six consignments totalling 1,187 cartons were discharged at the port.

In September the vessel "Sumida Maru" discharged three consignments of 25, 40 and 50 cartons, a total of 5,750 lbs. Bacteriological examination revealed the presence of *staphylococcus aureus* and a high colony

count in two consignments (3,250 lbs.), which failed to satisfy the standard and consequently were rejected and re-exported to Japan. The third consignment showed some contamination with staphylococcus aureus and clostridium welchii but was within the accepted limits and released. A warning letter was sent to the importers.

Two consignments in November, totalling 22,300 lbs., were discharged from the "Saga Maru" and were released after examination and sampling.

In December, 400 cartons (10,000 lbs.) satisfied the standard and were released.

Prawns from Chile

In October two shipments of prawns, one of 162 cartons (24 × 16-oz. slabs) and one of 120 cartons (20 × 16-oz. slabs) were discharged in Liverpool from the vessel "Santander". Samples from these consignments were examined bacteriologically and found to be grossly contaminated.

One slab from each of 26 cases was released to the consignee of the first shipment for private examination and the remainder was released for delivery to London docks for re-export to Hamburg, where the goods were to be reprocessed and sold in Germany.

Fifteen cartons from the second consignment were released to Southampton for re-export to Cape Town and one carton was permitted to go to Bermondsey for private examination. The balance of the shipment is still detained in Liverpool awaiting disposal.

A consignment of baby lobsters (121 cartons in 10 × 2-lb. bags) was also discharged from the vessel "Santander" in October. Here again sampling revealed bacteriological contamination far in excess of the accepted standard and the shipment has been rejected and is detained in Liverpool awaiting disposal, except for one carton released to the importers for their private investigations.

Mussels

Quantities of mussels which have been processed in satisfactory cleansing beds, as indicated by certificates attached to the bags, have been imported from time to time from Eire. They have arrived in a satisfactory condition and no special action was necessary.

Two consignments came from Eire and did not bear certificates to show that cleansing had been done at an approved station. Consequently samples were taken from each of these consignments and submitted to the Public Health Laboratory Service for bacteriological examination. Satisfactory reports were received and the mussels were released.

No notification has been received during the year from the Ministry of Health of approval having been given to any new establishments for the cleansing of shellfish.

FRESH FRUIT AND VEGETABLES, ETC.

The vessel "Egyptian" came to Liverpool in June and discharged 10,219 bags of carrots from Cyprus. Decomposition and mould were observed on preliminary examination. Investigation and a 100 per cent examination was carried out, which resulted in rejection of 3,744 bags (209,622 lbs.) on the quay. 622 bags were taken to districts outside Liverpool for sorting under supervision and the Medical Officers of Health of the areas concerned were informed.

A consignee was permitted to move 390 bags to a local warehouse and of these, 205 bags (5,740 lbs.), were rejected after examination.

Sampling under the Public Health (Preservatives in Food) Regulations

Ten samples from 10 consignments of apples and 5 samples from 4 consignments of pears were examined for presence of residue of insecticide sprays.

Two samples from 2 consignments of apples showed presence of lead and arsenic equal to the permitted limit and consequently the consignments were released and the importers advised of our findings.

Tea suspected of Metallic Contamination

Following positive findings last year of metallic contamination in tea from Formosa, we sampled again this year. Two consignments only were discharged here and these were found entirely satisfactory. Three samples of Indonesian tea and two from Argentine were completely satisfactory.

Green Root Ginger from West Africa

The m.v. "Aureol" brought 70 bags, weighing 10,290 lbs., of this commodity to Liverpool in April and discharged it at South Canada

Dock. Inspection and examination revealed part decomposition and attempts made at a warehouse to recondition the shipment were unsuccessful. The whole consignment was destroyed at Dingle tip.

Ground Nut Kernels from India

Eight hundred bags of this commodity were landed from the vessel "Caledonia" in August and were found to be insect infected, stale and mouldy. The total consignment of 89,600 lbs. was re-exported to Rotterdam for animal feeding.

Shelled Almonds from Spain

Late in December, 400 bags of this commodity were landed from the vessel "Puerto de Burriana" at Toxteth Dock. Examination showed the almonds to be wet, mouldy and orange-tainted. The consignment has been removed to warehouse and cartons are being dried in an oven, and the mould removed. The process of bleaching and re-examination is not yet completed.

Beans contaminated with Levelite

During the year 10 ships brought a total of 46,312 bags of butter beans from Madagascar to the port. All the consignments had been treated with "levelite" insecticide before export and consequently this had to be removed before distribution. The work was done mainly by a seed merchant in Liverpool.

TINNED GOODS OTHER THAN MEAT

Consignments of tinned goods containing meat or meat products have already been dealt with under the section of this report relating to meat and meat products. The condition of tinned goods, entering the port during 1961, was generally very good. In many cases, however, faults affecting small numbers of tins were detected upon examination and dealt with appropriately. The total number rejected is shown in the table on page 46.

The following consignments appeared to be of special interest, and are therefore mentioned individually:

Canned Fruit from Argentine

The vessel "Thorpe Grange" landed 3,000 crates (18,000 tins) of canned sliced peaches on 18th April at Liverpool and a preliminary

examination showed that a 100 per cent examination would require to be carried out. This full examination was completed in a warehouse by 23rd May and 273 crates containing 1,641 tins, totalling 10,256 lbs., were rejected, having been found blown or burst. These rejects were destroyed at Sefton tip.

Two consignments of 1,041 and 101 crates of peaches canned in water were fully examined by Port Food Inspectors in warehouses in the City. From the first, 288 crates containing 1,728 tins weighing 19,008 lbs. were found blown or burst and were rejected. From the second, 39 crates of 234 tins totalling 2,574 lbs., were destroyed for the same reason.

Canned Grapefruit from Spain

The vessel "La Pared" discharged a shipment of 100 cartons of canned grapefruit sections in February at Queens Dock.

Before examination 12 cartons were removed and 100 per cent examination was carried out on the remainder on 16th March. Of these, 16 were blown or burst. A second examination on the balance on 23rd May caused rejection of 14 cartons. The importers failed to remove the remainder and further examinations during the year continued until the whole consignment was rejected as blown or burst. Samples sent to the City Analyst in April were reported free from metallic contamination but the presence of alcoholic fermentation was noted. Bacteriological reports showed growths of yeast only.

DAMAGED CARGOES

The following are three types of damaged cargoes dealt with during the year.

Tea from Pakistan

The vessel "Clan Mackinlay" discharged 101 chests of tea at Liverpool in January. On examination, damage by bilge water was noted and the consignment was transferred to a warehouse for reconditioning. A total of 3,314 lbs. was rejected as unfit for use.

Brazil Nut Kernels

The vessel "Anselm" in August discharged a consignment of 3,870 cases, each containing 2 x 33-lb. tins which were damaged when the ship's ballast tanks overflowed. Examination on the quay caused rejection of 548 tins, totalling 18,084 lbs., for mould.

Raisins from U.S.A.

Five hundred cartons were discharged here from the vessel "Pacific Unity" in December. It was found that the consignment had been damaged by borax, an adjacent cargo. Reconditioning and repacking was carried out in a warehouse and 485 cartons were passed as suitable for use: 450 lbs. were rejected.

IMPORTATIONS OF MEAT NOT FOR HUMAN CONSUMPTION

This commodity is subject to the Meat (Staining and Sterilisation) Regulations 1960 which require that any imported meat known or found to be unfit for human consumption must either be sterilised in the port area, or moved to a place where sterilisation can be undertaken, in such a way as to ensure that there can be no pilferage or disposal of the meat en route.

407 consignments of meat not for human consumption came into the port during 1961. Most of these, made up of 233,193 packages, came from Australia, New Zealand and Eire. No major difficulties were encountered in securing compliance with the provisions of the Regulations as full information was readily given by the importers, often prior to arrival of the consignment, concerning the intended destination: suitably locked and labelled vehicles were always provided by the transport companies concerned in delivery.

IMPORTATIONS OF FOOD OTHER THAN FOR HUMAN CONSUMPTION

During 1961, 36,447 packages of whalemeat, mostly from Japan, were landed at Liverpool and transferred to processing establishments for conversion into animal food.

EXCHANGE OF INFORMATION

In July, 1960, Liverpool Port Health Authority initiated a system for the exchange of information between seaports concerning positive findings after examination of imported food. It was considered that the exchange of such information would be of great assistance and guidance to medical officers at other seaports. Copies of this information circular were sent also to the Ministry of Health and the Ministry of Agriculture Fisheries and Food.

During 1961, 106 circulars bearing this information were sent out and 16 were received by this Authority from other seaports.

Two quarterly returns are now routinely made to the Ministry of Agriculture, Fisheries and Food: one gives full details of any consignments of meat or meat products, imported through Liverpool and found to be seriously unsound. These have already been mentioned earlier in this report under the countries of origin. The other gives details of all contraventions of the Recognised Official Certificate procedure.

The following table shows the total quantities of unsound foodstuffs either destroyed or utilised under supervision during the year 1961:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal ...	101	14	3	—
Offal (Beef, Mutton, etc.)	15	1	1	—
Canned Goods	201	4	3	—
Fruit and Vegetables	6,597	17	3	—
Cereals	489	3	3	—
General (Lard, Coconut, Butter, etc.)	167	11	3	—
Total	7,572	14	—	—

A total of 149 tons 8 cwts. 0 qrs. 17 lbs. of unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year, and suitably disposed of to local refiners for reconditioning.

The following tables show the variety and numbers of samples submitted to the Public Health Laboratory Service and the City Analyst during the year 1961:—

Samples relating to imported food

Submitted to the Public Health Laboratory Service

Desiccated Coconut	10,342
Egg, frozen and dried	1,859
Grapefruit, canned	4
Lobsters, frozen	12
Mussels	3
Prawns, frozen	73
Chopped Pork, canned	6
Sheep Tongues, canned	8
Seafood	2
Shrimps, frozen and dried	58

Submitted to the City Analyst

Apples...	...	...	...	...	...	...	10
Beef, canned	...	...	...	...	...	...	2
Grapefruit	...	...	...	...	...	...	2
Grapefruit, canned	...	...	...	...	...	...	4
Lard	...	...	...	...	...	...	6
Oranges	...	...	...	...	...	...	38
Pears	...	...	...	...	...	...	5
Mutton, canned	...	...	...	...	...	...	2
Tea	...	...	...	...	...	...	5

Samples relating to investigations following food-poisoning and other illness within the port*Submitted to the Public Health Laboratory Service*

Ships' Drinking Water	...	...	...	...	...	...	356
Cockles	...	...	...	...	...	...	19
Food, various	...	...	...	...	...	...	23

In addition to the above, the following samples were submitted for bacteriological examination—

Faeces	...	...	...	...	...	...	166
Pigeons	...	...	...	...	...	...	3
Rags	...	...	...	...	...	...	10
Shed Sweepings	...	...	...	...	...	...	1
Straw	...	...	...	...	...	...	9

MISCELLANEOUS**Official Visits**

The Parliamentary Secretary to the Ministry of Health, Miss E. Pitt, visited the City of Liverpool on 4th April. The method of inspection of boneless beef and boneless mutton was demonstrated in the Alexandra Dock Cold Stores, and a second demonstration in Gladstone Dock shed, to show the technique of drawing samples of desiccated coconut, was also arranged.

Dr. L. Burema, Director of the Municipal Medical and Health Service, Rotterdam, and Dr. J. Huisman, Port Medical Officer, Rotterdam, came to Liverpool during October for a short stay during which time topics of common interest between our two ports were discussed.

I desire again to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, Ministry of Transport, the Mersey Docks and Harbour Board and their officers, river pilots, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

ANDREW B. SEMPLE,

Medical Officer of Health,

Liverpool Port Health Authority.